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Rutkow et al.

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[54] **IMPLANTABLE MESH PROSTHESIS AND METHOD FOR REPAIRING MUSCLE OR TISSUE WALL DEFECTS**

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[56] References Cited

U.S. PATENT DOCUMENTS

2,836,181 5/1958 Tapp 623/1
4,140,126 2/1979 Choudhury 623/1
4,452,245 6/1984 Usher 606/151
4,710,192 12/1987 Liotta et al. 623/1

4,769,038 9/1988 Bendavid et al. 606/151
4,781,191 11/1988 Thompson 606/151
5,116,357 5/1992 Eberbach .
5,122,155 6/1992 Eberbach .
5,141,515 8/1992 Eberbach .
5,147,374 9/1992 Fernandez 606/151

OTHER PUBLICATIONS

Gilbert, Arthur I., M.D., "Inguinal Hernia Repair: Biomaterials and Sutureless Repair", Perspectives in General Surgery, vol. 2, No. 1, pp. 113-129, 1991.

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ABSTRACT

An implantable prosthesis including a conical mesh plug having a pleated surface which conforms to the contours of the defect being repaired. Mesh filler material positioned in the plug stiffens the implant when it is compressed within the defect.

26 Claims, 2 Drawing Sheets

